Work Order ID 57284



Page 1

March 31, 2010 1:03:16 PM

Item ID:

D205-634-041

Accept

Setup Start

Stop

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

QC:

Start Qty: 1.00 **Required Date: 20/04/2010**

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Date: 10-3-3 Tooling:

Date:

SPC (Y/N):

Date:

Date:

Start

Run

Stop

Reject Insp.

Sequence ID/ Work Center ID

Operation Description

Revision Nbr

Set Up/

Run Hours

Draw Number

Plan Draw Rev. Code

Accept Qty

Reject Qty

Number

Stamp

Draw Nbr

D2580 Rev D

Document Control

DOCUMENT CONTROL

Memo

0.00

0.00

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

CNC Bend 1

CNC Delta 100 Bender

0.00

BENDING MACHINE - SKIDTUBES

2-Cut tubes as per Dwg. D2580

	•							`	1 C 1
W/O:			WC	RK ORDER CHANG	GES	·			
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
•									
Part No	•	PAR #:	Fault Cate	gory:	NCR: Ye	s No	DQA:	Date: _	
	R	esolution:	Disposition	1:	QA: N/C	Closed:		Date: _	•
NCR:		1	WORK ORDE	ER NON-CONFORM	ANCE (N	CR)			
DATE	STEP	Description of NC	Corrective Action Section Initial Action Description		ction B	- Verit		Approval	Approval
		Section A	Chief Eng	Chief Eng	De		Section C	Chief Eng	QC Inspector
•									-
									1
		م المراسم المراسم المراسم							
		á.							
								\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
				i i					
							•		

Work Order ID 57284

March 31,2010 1:03:16 PM



Page 2

Item ID:

D205-634-041

Accept

Setup Start



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Qty: 1.00 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

A	DI	or	ov	al	s:

Process Plan: _____ Date: ____ Tooling:

Date:

Start

Stop



Required Date: 20/04/2010

QC: ____

Date: _____

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID Operation Description

Set Up/ **Run Hours** Draw Number

Draw Plan Rev. Code

Accept Qty

Run

Reject Reject Qty Number

Insp. Stamp

120

Skidtubes Skidtubes

Memo

Memo

0.00

0.00

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

10-4-21

130



QC5- Inspect part completeness to step on W/O

Quality Control

Dart Aerospace Ltd WORK ORDER CHANGES W/O: Approval DATE Approval **STEP** PROCEDURE CHANGE By Qty Date Chief Eng / QC Inspector Prod Mgr Part No: ______ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ___ Date: ___ Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: ____ WORK ORDER NON-CONFORMANCE (NCR) NCR: \ **Corrective Action** Section B **Description of NC** Verification **STEP** Approval Approval DATE Initial Sign & **Action Description** Section A Chief Eng QC Inspector Section C Chief Eng Chief Eng Date

Work Order ID 57284

March 31, 2010 1:03:16 PM



Page 3

Item ID:

D205-634-041

Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

QC:

Start Qty: 1.00

Required Date: 20/04/2010

Req'd Qty: 1.00



Accept



Setup Start





Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Date:

Cust Item ID:

Customer:

Run Start

Stop



Sequence ID/ **Work Center ID**

140



Skidtubes Skidtubes

Operation Description

Set Up/ **Run Hours**

SPC (Y/N):

Draw Number Draw Rev.

Plan Accept Code Qty

Reject Reject **Qty**

Number Stamp

Memo

0.00

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004 Aluminum Rod

Date:____

ep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI

004 For D2579, spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill A/R□□□ Aluminum Rod

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web.Deburr

5-Counterbore crossbolt spacers to 7/16." $\stackrel{.}{1D}x$ 1:0" deep as per Dwg D2580. Deburr holes

-6-Drill pilot holes for aft cap using DT 8215Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640"and Deburr

	Aerospace	
HOPT	AAFACHAAA	1 1/4
vait	ACI USUALE I	LIU

W/O: WORK ORD					R CHANGES .					
DATE	STEP		PRC	OCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
				, 					-	
						·				
Part No	: <u>D</u> 205	-634-0L	+)PAR #:	Fault Category: <u><درال دال</u> كوع	NCR: Ves	No DQ	A:	Date:	/00SUS	
		solution:	rework	Disposition:	QA: N/C (Closed:	1	Date: 🔏	0/05/04	

NCR: 5	1284	W						
DATE	STEP	Description of NC	Initial	Corrective Action Section B	Verification	Approval	Approval	
		Section A	Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
		when Drilling AFT CAP hole	12	Bil halo . Hld	BEI		1 th	
	,,	techo man de 11.	opp	Re OSTON A/R MISZOF	BE 100122	10-04-22	092.42	
10/04/22	华140,7	to B be elongites on aff.			, A			صدات
-01122	W, 3	to be econgress on afy.		- Grino whe well flush ensine	M) 10 od 12			(Spots
,		Rl. empor to Pous		AND ON				100
				- Re Drill en west bustin	Moder			
				BIET MORA PADEFUL	1,10%	5,01,013		
				Chara 1		10 for	,	10/0
					7			
			<i>/</i> . \			(
			1		1		$V \sim$	/
		, .						

NOTE: Date & initial all entries

Work Order ID 57284



Page 4

March 31, 2010 1:03:16 PM

Required Date: 20/04/2010

Item ID:

D205-634-041

Accept



Setup Start



Stop

Revision ID:

Replacement Skidtube Item Name:

Start Date:

31/03/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: Date:

Tooling:

Date:

Start Run

Stop



Date:_____

SPC (Y/N):

Date:

Sequence ID/ **Work Center ID**

150



Quality Control

Operation Description

QC10- Inspect visual per QSI004- ground welds

Set Up/ **Run Hours** Draw Number Draw Plan Rev. Code

Accept Qty

Reject Qty

Reject Number Stamp

Insp.

Memo

0.00

0.00

160



Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Pressure Wash per QSI005 4.3

Memo

0.00

170

HandFinish

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

									, ,
W/O:			W	ORK ORDER CHANG	ES				•
DATE	STEP	PR	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	·	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date:	
	Resolution: Disposition:					losed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCI	7)			
DATE	STEP	Description of NC Section A	Corrective Action Initial Action Descrip		on B Sign		cation	Approval	Approval
		Section A	Chief Eng	Chief Eng	Date		ion C	Chief Eng	QC Inspector
									-
								·	
							:		:
								:	
•									

Work Order ID 57284

March 31, 2010 1:03:16 PM



Page 5

Item ID:

D205-634-041

Accept

Setup Start

Stop



Revision ID:

Replacement Skidtube Item Name:

Required Date: 20/04/2010

Start Date:

31/03/2010

Start Qty: 1.00 Req'd Qty: 1.00



Date:_____

Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan: _____ Date:___

Tooling:

Date:

Run Start

Reject

Qty



SPC (Y/N):

Set Up/

Run Hours

Date:

Draw

Rev.

Plan

Code

Stop



Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

180

Powdercoat

Powder Coating

Operation Description

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

114207

Memo

START TIME: OVEN TEMPERATURE:

FINISH TIME:

0.00

190

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

Accept

Qty

D. Bf 10-4-27

	•									•			
W/O:	-		V	VORK ORDER CHAN	IGES								
DATE	STEP	PRO	OCEDURE CH	HANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
Part No	•	PAR #:	Fault Ca	itegory:	NCR	: Yes N	lo DQA	٨:	_ Date: _				
	Resolution: Disposition:				QA:	N/C Clo	sed:		Date:				
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC			ection B	Sign & Verifica		ation	Approval	Approvai			
		Section A	Initial Chief Eng	Action Description Chief Eng					Chief Eng	QC Inspector			
										-			
										·			
								:	•				
	1	r	I				1	1		ı			

Work Order ID 57284

March 31, 2010 1:03:16 PM

Required Date: 20/04/2010



Page 6

Item ID:

D205-634-041

Accept

Plan

Code

Accept

Qty

Setup Start

Stop



Revision ID:

Item Name:

Replacement Skidtube

Start Date:

31/03/2010

Start Otv: 1.00

Rea'd Otv: 1.00



Cust Item ID:

Customer:

Draw

Number

Reference:

A	nn	ro	va	le:	
\sim	มม		٧a	13.	

Process Plan: Date: Tooling:

OC:

Operation

Description

Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Draw

Rev.

Run Start

Reject

Oty

Stop

Reject

Number



Insp.

Stamp

Sequence ID/

Work Center ID

200



HandFinish Hand Finishing Memo

0.00

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of

Sikaflex on insert holes before installing wearplates A/R 🗆 🗆 Sikaflex-291 M

Sikaflex expire date:

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per OSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive

A/R 🗆 🗆 Sikaflex-291 🖂

Sikaflex expire date:

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Bl 10-4-27

W/O:			WC	RK ORDER CHANG	ES				· - · · · · · · · · · · · · · · · · · ·
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	_ NCR: Yes	No DQ	A:	Date: _	
Resolution:			Disposition: QA			losed:		Date: _	
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC Section A	Initial Action Descrip Chief Eng Chief Eng		on B Sign Date	& Sect	cation ion C	Approval Chief Eng	Approval QC Inspector
			Cfiler Eng	Chief Eng	Date				-
		· · · · · · · · · · · · · · · · · · ·							

Work Order ID 57284

March 31, 2010 1:03:16 PM

Required Date: 20/04/2010



Page 7

Item ID:

D205-634-041

Accept

Setup Start

Stop



Revision ID:

Item Name Start Date:

Replacement Skidtube

31/03/2010

Start Otv: 1.00

Rea'd Oty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: Date: Tooling:

Date:

Date:

Start Run

Stop



Sequence ID/

Work Center ID

210

Ouality Control

Operation Description

OC5- Inspect part completeness to step on W/O

QC: Date: SPC (Y/N):

Set Up/ **Run Hours**

Draw Number Rev.

Draw Plan Code

Accept Reject Qty Oty

Reject Number

Insp. Stamp

Memo

0.00

0.00

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for

Foreign objects per OSI 024

10-3-35

220

Packaging Packaging

Packaging

Memo

Location:

0.00

0.00

Identify and pack for shipping as per PPPD205-634-041

PPP Rev:

230

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/05/04 Af

	-								
W/O:			W	ORK ORDER CHANG	ES				
DATE	STEP	PRO	DCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
									,
Part No	•	PAR #:	Fault Cat	egory:	_ NCR: Yes	No DQ	A:	Date:	
Resolution:									
NCR:			WORK ORI	DER NON-CONFORMA	NCE (NCF	R)	,		
DATE	STEP	Description of NC	Corrective Action Initial Action Description		on B Sign &	Verific		Approval	Approval
		Section A	Chief Eng	Chief Eng	Date	Secti	on C	Chief Eng	QC Inspector
							:		-
				·					
	-								
		> .			3.		٠,		
				4			•		
									_

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N \Box 02.08.28 \Box FP was QC5 in Step 27; Added QC5 to Step 30 \Box KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

IPP Rev. O 06.02.28 Added paperwork EC

Start Date: 31/03/2010

Start Qty: 1.00

Required Date: 20/04/2010

Required Qty: 1.00

D2580-1

Manufactured

Manufactured

No

110

Each

6.0000

1.0000

205 Skidtube bent detail

Warehouse Location Main Warehouse	Loc Q	<u>ty</u>	Loc Code	B 57	302	D	14/21
LG		6					
54541		2					
56975		2			-	_	
57028		2				_	
•	140	Each	120.0000	1.0000	-		

D2576-3

Step (maching detail)

Warehouse	Loc Oty	Loc Code
Location		
Main Warehouse		_
1.0	400	-

LG 120 46661 73 52215 47

_____ BE 10/04/21

	•								i
W/O:			WO	RK ORDER CHANGE	S				
DATE	STEP	PRO	OCEDURE CHAP	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				•					
	·								
			•				,		
Part No	:	PAR #:	Fault Categ	ory:	NCR: Yes	No DQ	A :	_ Date: _	
Resolution: Disposition: QA: N/C (QA: N/C C	losed:		Date:		
NCR:			WORK ORDE	R NON-CONFORMAN	ICE (NCF	R)			
DATE	STEP	Description of NC			ion B V		cation Approval		Approval
		Section A	, Initial Chief Eng	Action Description Chief Eng	Sign 8 Date		on C	Chief Eng	QC Inspector
									-
							,		·
	A-								
	,								
				,					
				•					

Picklist Print

March 31, 2010 1:03:20 PM

Page 2

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Oty: 1.00

Required Qty: 1.00

D2579

Manufactured

No

140

Each

306.0000 20.0000



Crossbolt Spacer

Warehouse	Loc Qty	Loc Code		
Location			• .	
Main Warehouse				
LG	306			
43988	4			
46434	4			
46956	2			
47797	9	•		
48272	2			
51314	71			
51315	30	*		
51525	. 4			
53780	3			
54543	18			
56715	2			,
56818	4			
57052	153		20	BE 10/04/21

	•								
W/O:									
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				•					
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DC)A:	Date:	
Resolution:									
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC	Description of NC Corrective Action		Section B		ication	Approval	Approval
DAIL	JILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat	& Sec	tion C	Chief Eng	QC Inspector
									-
								,	
								}	ļ.

Picklist Print

March 31, 2010 1:03:20 PM

Page 3

Work Order ID: 57284

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Qty: 1.00

Required Qty: 1.00

D2855

Manufactured

Purchased

No

No

200

Each

132.0000 1.0000



Cap

Warehouse	Loc Oty	Loc Code	
Location			
Main Warehouse			
FP6	1		
56613	1		
Main Warehouse		,	-
ST026	131		<u></u>
50513	1		
50770	1		BR 10-4-27
51539 🗸	35		
53791	94		
	200 Eac	h 1,299.000 2.0000	

AN3-5A

Bolt

Warehouse Location	Loc Oty	Loc Code
Main Warehouse		
ST350	1299	
100188 105057	188	
105057	1111	

2 fl 10-4-27.

	-									
W/O:			WO	RK ORDER CHANGI	ES					
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
•										
Part No	Part No: PAR #: Resolution:		Fault Categ	ory:	NCR: Yes					
			Disposition	:	_ QA: N/C C	losed:		Date: _		
NCR:		V	VORK ORDE	R NON-CONFORMA	NCE (NC	R)				
DATE	STEP Description of NC		Corrective Action Section I			Verific		Approval	Approval	
		Section A	Chief Eng	Action Description Chief Eng	Sign Date		on C	Chief Eng	QC Inspector	
									-	
								-		
				,						
<u></u>										
			*							
		4								
		 冬	A Barrell	•						

•		•		-			
Dr.	ckl	10	•	v	149 1	-	•
				-			1
	~		•		R (R		•

March 31, 2010 1:03:20 PM

Page 4

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09

SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Oty: 1.00

AN9601D10L

Purchased

Purchased

No

No

200

Each

2.849.000 2.0000



Washer

Warehouse	Loc	Qty	Loc Code	
Location			•	
Main Warehouse				
ST348		2849		
101291		16		
105793		49		
. 110985		2784		
	200	Fach	886 0000	50.000

2 pl 10-4-27



ALS7-1032-130

Insert

Warehouse

Location

Loc Otv

Loc Code

ALH-1032-130

Main Warehouse ST282 886 108606 52 111529 130 111779 34 112772 11 113238 659

50 fl 10-4-27.

						*		•
W/O:			WO	SES			· ·	
DATE	STEP	PROCEDURE CHANGE			Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					:			
Part No	:	PAR #:	Fault Categ	jory:	NCR: Yes	No DQA:	Date: _	
Resolution:							Date: _	
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NCF	R)		
DATE	STEP	Description of NC			tion B	Verification		Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date		Chief Eng	QC Inspector
								-
		,						
	-				·			
		, '						

Picklist Print

March 31, 2010 1:03:20 PM

Page 5

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork IPP Rev:P 07-07-09

SS Wearplates & Gaskets

Start Otv: 1.00

Start Date: 31/03/2010

Required Date: 20/04/2010

Required Oty: 1.00

50 Bl10-4-27.

AN3C4A

Purchased

No

200

113644

113749 114103

114108

Each

889.0000 50.0000



BOLT

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse ST350 [[4336]	889	
112314	13	
112720	12	
112724	3	
112829	1	
112991	2	
113121	64	
113226	227	

AN960C10L

Purchased

NAS 1149 CO332R

200

Each 114 341

12

54

500

0.0000

50.0000

50. pl 10-4-27.

washer

W/O:			WC	RK ORDER CHANG	GES				<u> </u>
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No		PAR #:	Fault Cated	iorv:	NCR: Yes	No DO	Δ.	Date:	
						osed: Date:			
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE (NCR)	, <u>, , , , , , , , , , , , , , , , , , </u>		
DATE	STEP	Description of NC	Corrective Action Section B				cation	Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Sect	ion C	Chief Eng	QC Inspector
									-

			1	
Pic	1_1:.	~ 4 T))	. 4
PIC	KHS	ST P	rın	H

March 31, 2010 1:03:20 PM

Page 6

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork IPP Rev:P 07-07-09

SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Otv: 1.00

D3566-13

Manufactured

Manufactured

No

No

200

Each

60.0000

1.0000

Gasket

l			
	1		

Warehouse	Le	oc Qty	Loc Code				
Location							
Main Warehouse							
FP .	-	60					
45717		1					
50265		1					
53461		58					
	200	Each	21.0000	1.0000			

Gasket

D3566-5

Warehouse Loc Oty Loc Code Location Main Warehouse FP 3 36113 46186 51260 Main Warehouse FP015 13 13

1 pl 10-4-27.

Main Warehouse FP19

55335

W/O:			W	ORK ORDER CHANG	ES						
DATE STEP		PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
									: :		
			, , ,			·					
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	\:	Date:			
			ıtion: Disposition:								
NCR:				ER NON-CONFORM			·-				
DATE	CTED	Description of NC	otion of NC Corrective Action Section			Verifica		tion Approval	Approval		
DATE	STEP Description of NC Section A	Section A	Initial Chief Eng	Action Description Chief Eng	Sign a	Section	Section C	Chief Eng	QC inspector		
									-		
		•									
		·									
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			· · · · · · · · · · · · · · · · · · ·							
	•										

Picklist Print

March 31, 2010 1:03:21 PM

Page 7

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Otv: 1.00

Required Qty: 1.00

D3566-1

Manufactured No

Manufactured

200

Each

29.0000 2.0000

Gasket

<u>Warehouse</u>	Loc	: Oty	Loc Code		
Location					
Main Warehouse					2 /2/ 11/20
FP 57257		10			2 12 10-4-27
46349		1			,
51218		1			
51259 • •		3			
52512		3			
54480		1			
55011		1			
Main Warehouse					
FP015		19			
56825		19			
	200	Each	9.0000	1.0000	· · ·

D3564-11



Wearshoe

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
FP 57759	2	
45823	1	
50112	. 1	
Main Warehouse		
FP19	7	
56834	7	

•	Bl 10-4-21.
	•

W/O:			WC	RK ORDER CHANG	BES			1.	•
DATE	STEP	PR	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		\							
						·	·		
			-						
Part No	·	PAR #:	Fault Cate	jory:	_ NCR: Yes	No DQ	A :	_ Date: _	
	Re	solution:	Disposition	n:	_ QA: N/C Cld	sed:		Date:	
NCR:			WORK ORDI	R NON-CONFORM	ANCE (NCR)	<u> </u>	_	
DATE	STEP	Description of NC		tion B	Verification			Approval QC Inspector	
	Section A		Initial Action Description Chief Eng Chief Eng		Sign & Date	Section C			Approval Chief Eng
									-

Picklist Print

March 31, 2010 1:03:21 PM

Page 8

Work Order ID: 57284

D205-634-041



Parent Item Name:

Replacement Skidtube

Comments:

Parent Item:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Qty: 1.00

Required Qty: 1.00

D3564-13

Manufactured

Manufactured

No

200

Each

39.0000

1.0000

Wearshoe

Warehouse	<u>Lo</u>	oc Oty	Loc Code		•
Location					
Main Warehouse					
FP		21			
45409		2			
46495		10			
56285*		9			
Main Warehouse					A A
FP17		18			1 15-41-27.
56533		18			1 pt 10-4-0+.
	200	Each	6.0000	1.0000	

D3564-9

Wearshoe

Warehouse Loc Oty Loc Code Location

Main Warehouse

55334

1 pl 10-4-27.

	. oopase								
W/O:			WC	ORK ORDER CHANG	ES	·			
DATE	STEP	PR	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						<u> </u>			
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA :		_ Date: _	
Resolution:			Disposition	_ QA: N/C Closed:			Date:		
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR)	.,		
DATE	STEP Description of NC Section A	TED Description of NC		on B	Verifica	tion Approval	Approval	Approval QC Inspector	
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section			
									-
							.		

Picklist Print

March 31, 2010 1:03:21 PM

Page 9

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork EC

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

Start Date: 31/03/2010

Required Date: 20/04/2010

Start Oty: 1.00

Required Otv: 1.00

D3564-5

Manufactured

Manufactured

No

200

Each

20.0000

1.0000

Wearshoe

Warehouse	Loc Q	<u>Y</u>	Loc Code	
Location				
OFFSHORE				
FG		2 .		
34806		2		
Main Warehouse				
FP		18		
45824		1		
55024		6		
55333√		11		
	200	Each	318.0000	16.0000

D2594-3

O-Ring, 205 Skidtube

Warehouse Loc Oty Loc Code Location

Main Warehouse FP

55546

51613 52562 318 27 13

278

16.bl 10-4-27.

-Bl 10-4-27.

	•									• .
W/O:			W	ORK ORDER CHANG	GES					
DATE STEP F			OCEDURE CHANGE			у .	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
					,					
Part No:		PAR #:	Fault Cat	egory:	NCR: \	es N	o DQ	\ :	_ Date: _	
			Disposition: 0			QA: N/C Closed: Date:				
NCR:			WORK OR	DER NON-CONFORM	IANCE (N	ICR)				
DATE	STEP	Describtion of NC			Verit			ication Approval Approva		
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng		gn & Date	Section		Chief Eng	QC Inspector
										-
		ŕ								
			1				1			

Picklist Print

March 31, 2010 1:03:21 PM

Page 10

Required Date: 20/04/2010

Required Qty: 1.00

16. bl 10-4-27

Work Order ID: 57284

Parent Item:

D205-634-041

Parent Item Name:

Replacement Skidtube

Comments:

IPP Rev:N□02.08.28□FP was QC5 in Step 27; Added QC5 to Step 30□KJ

IPP Rev P 10.02.19 per PAR09-043 EC verified by:DD

IPP Rev. O 06.02.28 Added paperwork

IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM

D2594-1

Manufactured No

200

Each

419,0000 16,0000

Start Date: 31/03/2010

Start Qty: 1.00

Plug, 205 Skidtube

Warehouse Location	Loc Oty	Loc Code
Main Warehouse		
FP .	419	
42221	16	
42807	92	
43884	3	
46435	2	
51527	9	
51757	6	
54008	1	
54643 /	15	
55002	275	



Dart Aerospace

	•							•	•
W/O:			WC	RK ORDER CHANG	ES	:			
DATE STEP P			ROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		•							
								•	
Part No:		PAR #:	_						
Resolution:			Disposition	_ QA: N/C CI	A: N/C Closed:			Date:	
NCR:			WORK ORDE	ER NON-CONFORMA	NCE (NCF	()			
DATE	STEP	Description of NC	Corrective Action Section B			Verificati		n Approval	Approval
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti		Chief Eng	QC Inspector
									-
P St						٠.			
10/4									
		•							



DESIG	##	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHEC	KED	APPROVED	DRAWING NO. RE	V. D
			D2580 SHEET 1 0	OF 3
DATE			TITLE S	CALE
07.0	02.27		205 SKIDTUBE ASSEMBLY	NTS
Α		96.09.16	NEW ISSUE	
В		96.12.02	AS MANUFACTURED	
С		98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D		07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	



QTY -041	QTY -045	Part Number	Description
X	-070	D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1.	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130	INSERT
		or AKS7-1032-130	
		or AKS4-1032-130	
		or AELS-1032-130	
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK OPPOS

GENERAL NOTES:

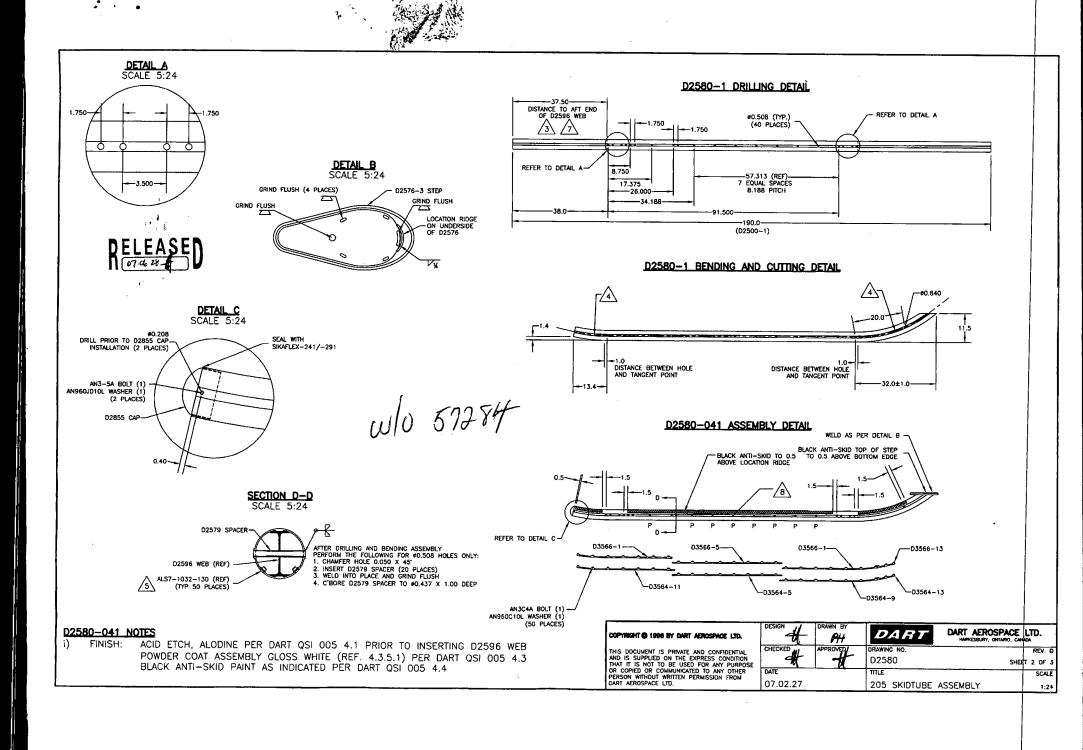
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:

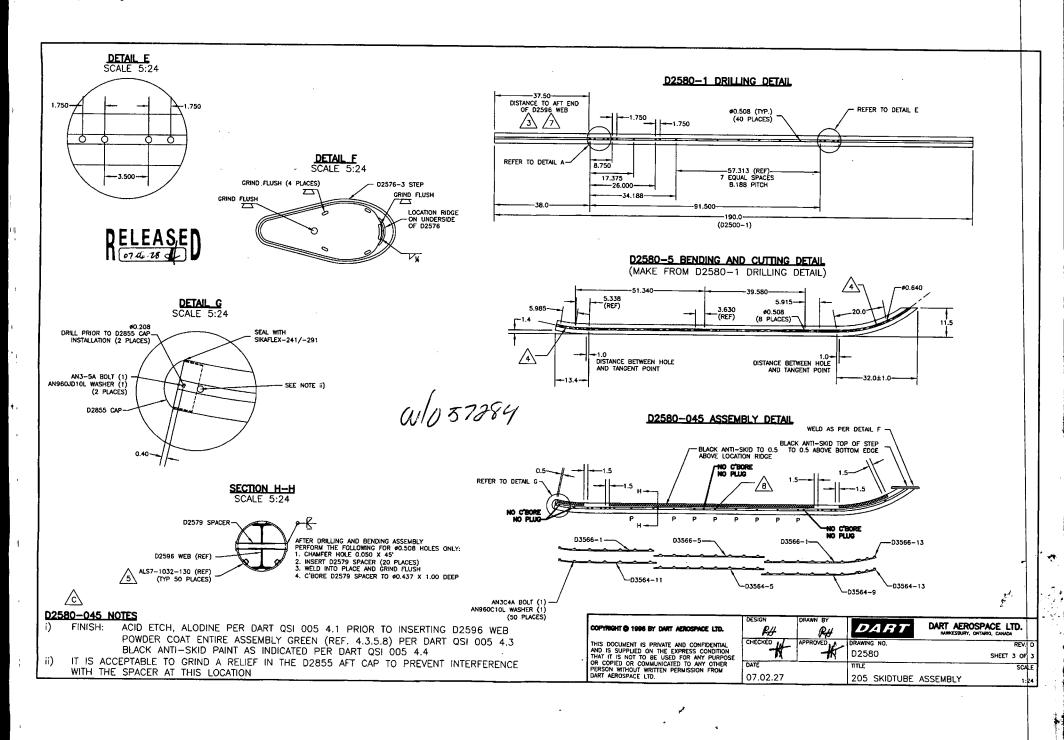
SEE NOTES ON PAGE 2 FOR D2580-041 AND PAGE 3 FOR D2580-045

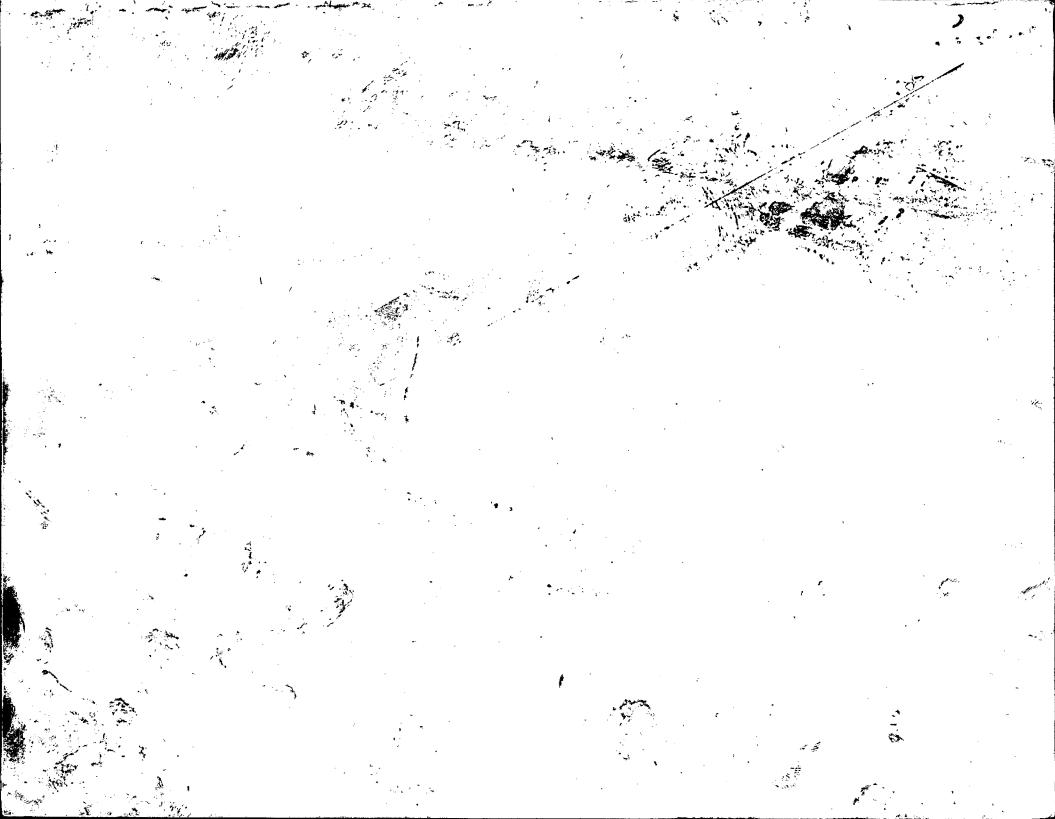
 INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

Copyright @ 1996 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.







NO. <u>אבר</u>

AWS D17.1.2001 QUALIFICATION TEST RECORD

Name: Bardag Ellistt	
Job number: 569250	
Part number: D205-634-041	
Description: 205 skid tube	
Welding Process: Tig[/ Mig[]	
Base materiel: Aluminum	
Current:-AC[/] DG[-]-	

TEST REQUIREMENTS AND RESULTS

pass[/] pass[/]	fail[] fail[]
pass[/] pass[/] pass[/] pass[/] pass[/]	fail[] fail[]
	est Coupon 10 03 19 est Coupon 10 03 -1 9
_	pass[/] pass[/] pass[/] pass[/] pass[/] pass[/]

The above named individual is qualified in accordance with AWS D17.1.2001 to weld